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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Densen Cao

Serial Number: 10/072,831

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For: "Curing Light"

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Examiner: Ralph A. Lewis

Group Art Unit: 3732

Response to Office Action

Mail Stop: NON-FEE AMENDMENT
Commissioner for Patents
P. O. Box 1450
Alexandria, Virginia 22313-1450

Honorable Commissioner:

This paper is intended to be fully responsive to the office action with a mailing date of 12/19/2003.

Amendment

Please cancel claims 1-17 without prejudice.

Please add the following new claims:

Claim 18 (newly presented) 18. A curing light comprising:

a first semiconductor source of curing light,

a first primary heat sink to which said first semiconductor source of curing light is mounted,

a second semiconductor source of curing light,

a second primary heat sink to which said second semiconductor source of curing light is attached,

a secondary heat sink to which said first and second primary heat sinks are attached,

said first and second semiconductor sources of curing light being oriented so that light beams emanating from them overlap at least in part to provide an enhanced intensity light footprint which can be used to cure a desired material.

Claim 19 (newly presented) 19. A curing light as recited in claim 18 wherein said first and second primary heat sinks each have a mounting platform to which said semiconductor sources of curing light are attached.

Claim 20 (newly presented) 20. A curing light as recited in claim 19 wherein said mounting platforms are oriented to achieve said overlapping light beams.

Claim 21 (newly presented) 21. A curing light as recited in claim 18 further comprising:

a third semiconductor source of curing light,

a third primary heat sink to which said third semiconductor source of curing light is attached, and

said third primary heat sink being attached to said secondary heat sink.

Claim 22 (newly presented) 22 A curing light as recited in claim 21 wherein said third semiconductor source of curing light is oriented so that a light beam emanating from it overlaps said enhanced intensity light footprint at least in part

Claim 23 (newly presented) 23. A curing light as recited in claim 18 wherein said first semiconductor source of curing light emits light centered around a first wavelength λ_1 and said second semiconductor source of curing light emits light centered around a second wavelength λ_2, and wherein λ_1 is not equal to λ_2.

Claim 24 (newly presented) 24. A curing light as recited in claim 22

wherein said first semiconductor source of curing light emits light centered around a first wavelength λ_1;

wherein said second semiconductor source of curing light emits light centered around a second wavelength λ_2;

wherein said third semiconductor source of curing light emits light centered around a third wavelength λ_3;and

wherein at least one of λ_1 and λ_2 is not equal to λ_3.

Claim 25 (newly presented) 25. A curing light comprising:

a first semiconductor source of curing light,

a second semiconductor source of curing light,

a primary heat sink to which said first and second semiconductor sources of curing light are mounted,

a secondary heat sink to which said primary heat sink is attached,

said first and second semiconductor sources of curing light being oriented so that light beams emanating from them overlap at least in part to provide an enhanced intensity light footprint which can be used to cure a desired material.

Claim 26 (newly presented) 26. A curing light as recited in claim 25 wherein said primary

heat sink has a mounting platform to which said first and second semiconductor sources of curing light are attached.

Claim 27 (newly presented) 27. A curing light as recited in claim 26 wherein said mounting platform has surfaces are oriented to achieve said overlapping light beams via positioning of said semiconductor sources of curing light.

Claim 28 (newly presented) 28. A curing light as recited in claim 25 further comprising: a third semiconductor source of curing light.

Claim 29 (newly presented) 29 A curing light as recited in claim 28 wherein said third semiconductor source of curing light is oriented so that a light beam emanating from it overlaps said enhanced intensity light footprint at least in part

Claim 30 (newly presented) 30. A curing light as recited in claim 25 wherein said first semiconductor source of curing light emits light centered around a first wavelength λ_1 and said second semiconductor source of curing light emits light centered around a second wavelength λ_2, and wherein λ_1 is not equal to λ_2.

Claim 31 (newly presented) 31. A curing light as recited in claim 28

wherein said first semiconductor source of curing light emits light centered around a first wavelength λ_1;

wherein said second semiconductor source of curing light emits light centered around a second wavelength λ_2;

wherein said third semiconductor source of curing light emits light centered around a third wavelength λ_3;and

wherein at least one of λ_1 and λ_2 is not equal to λ_3.